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| APPLICATION NO.   | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO.   |
|---|-------------|----------------------|---------------------|--------------------|
| 10/630,501  | 07/30/2003  | Robert L. Turner     | 54599US032          | 7907               |
| 36001   | 7590        | 10/16/2006           | EXAMINER            | ALEJANDRO, RAYMOND |
| 3M INNOVATIVE PROPERTIES COMPANY<br>P.O. BOX 33427<br>ST. PAUL, MN 55133-3427 |             |                      | ART UNIT            | PAPER NUMBER       |
|   |             |                      | 1745                |                    |

DATE MAILED: 10/16/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Advisory Action  
Before the Filing of an Appeal Brief**

|                                   |                                   |
|-----------------------------------|-----------------------------------|
| Application No.<br><br>10/630,501 | Applicant(s)<br><br>TURNER ET AL. |
| Examiner<br><br>Raymond Alejandro | Art Unit<br><br>1745              |

**--The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

THE REPLY FILED 10 October 2006 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE.

1.  The reply was filed after a final rejection, but prior to or on the same day as filing a Notice of Appeal. To avoid abandonment of this application, applicant must timely file one of the following replies: (1) an amendment, affidavit, or other evidence, which places the application in condition for allowance; (2) a Notice of Appeal (with appeal fee) in compliance with 37 CFR 41.31; or (3) a Request for Continued Examination (RCE) in compliance with 37 CFR 1.114. The reply must be filed within one of the following time periods:

- a)  The period for reply expires \_\_\_\_\_ months from the mailing date of the final rejection.  
 b)  The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection.

Examiner Note: If box 1 is checked, check either box (a) or (b). ONLY CHECK BOX (b) WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**NOTICE OF APPEAL**

2.  The Notice of Appeal was filed on \_\_\_\_\_. A brief in compliance with 37 CFR 41.37 must be filed within two months of the date of filing the Notice of Appeal (37 CFR 41.37(a)), or any extension thereof (37 CFR 41.37(e)), to avoid dismissal of the appeal. Since a Notice of Appeal has been filed, any reply must be filed within the time period set forth in 37 CFR 41.37(a).

**AMENDMENTS**

3.  The proposed amendment(s) filed after a final rejection, but prior to the date of filing a brief, will not be entered because
- (a)  They raise new issues that would require further consideration and/or search (see NOTE below);
  - (b)  They raise the issue of new matter (see NOTE below);
  - (c)  They are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or
  - (d)  They present additional claims without canceling a corresponding number of finally rejected claims.

NOTE: \_\_\_\_\_. (See 37 CFR 1.116 and 41.33(a)).

4.  The amendments are not in compliance with 37 CFR 1.121. See attached Notice of Non-Compliant Amendment (PTOL-324).

5.  Applicant's reply has overcome the following rejection(s): \_\_\_\_\_.

6.  Newly proposed or amended claim(s) \_\_\_\_\_ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).

7.  For purposes of appeal, the proposed amendment(s): a)  will not be entered, or b)  will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.

The status of the claim(s) is (or will be) as follows:

Claim(s) allowed: \_\_\_\_\_.

Claim(s) objected to: \_\_\_\_\_.

Claim(s) rejected: 1-10 and 15-17.

Claim(s) withdrawn from consideration: \_\_\_\_\_.

**AFFIDAVIT OR OTHER EVIDENCE**

8.  The affidavit or other evidence filed after a final action, but before or on the date of filing a Notice of Appeal will not be entered because applicant failed to provide a showing of good and sufficient reasons why the affidavit or other evidence is necessary and was not earlier presented. See 37 CFR 1.116(e).

9.  The affidavit or other evidence filed after the date of filing a Notice of Appeal, but prior to the date of filing a brief, will not be entered because the affidavit or other evidence failed to overcome all rejections under appeal and/or appellant fails to provide a showing of good and sufficient reasons why it is necessary and was not earlier presented. See 37 CFR 41.33(d)(1).

10.  The affidavit or other evidence is entered. An explanation of the status of the claims after entry is below or attached.

**REQUEST FOR RECONSIDERATION/OTHER**

11.  The request for reconsideration has been considered but does NOT place the application in condition for allowance because: see next page.

12.  Note the attached Information Disclosure Statement(s). (PTO/SB/08) Paper No(s). \_\_\_\_\_.

13.  Other: \_\_\_\_\_.

Raymond Alejandro  
Primary Examiner  
Art Unit: 1745

***Response to Arguments***

1. Applicant's arguments filed 10/10/06 have been fully considered but they are still unpersuasive.
2. (*new response*) In the remarks, applicants “*re-asserts the arguments made in the amendment filed 07/20/06 and direct the Examiner’s attention to MPEP 2112 (IV)…*”. Accordingly, the examiner also re-asserts the position taken in the Office Action dated 08/17/06. Nothing is new in applicant’s reply. Simply, applicant has decided to challenge the examiner’s position without providing objective, scientific or sound evidence to demonstrate that the composition/material of the prior art is not non-crystalline or does possess a crystalline structure or is not amorphous. Accordingly, the examiner also asserts that it is not enough that applicant’s representative personally believes that the prior art’s composition/material does have a crystalline structure. That is to say, the arguments of counsel cannot take the place of evidence in the record. An assertion of what seems to follow from common experience is just attorney argument and not the kind of factual evidence that is required to rebut a prima facie case of inherent anticipation (See **MPEP 716.01 and 2145: Consideration of Applicant’s Rebuttal Arguments**). That is to say, a statement or argument by the attorney is not factual evidence. (See **MPEP 716.01 and 2145 Consideration of Applicant’s Rebuttal Arguments**).
3. (*new response*) Interestingly, applicant argues that because “*the cited reference provide few, if any details, regarding the manufacture of the alloys described therein....there is no basis for asserting that the prior art alloys inherently were identical to the claimed alloys in the absence of sufficient information regarding how they were manufacture*”. Therefore, the present application must be allowed; or as phrased by the applicant “*the rejection must be withdrawn*”.

In other words, let's forget the teachings and applicability of the prior art because it does not sufficiently describe the manufacturing technique of the material/composition. Thus, it is conveniently and fully irrelevant to the claimed invention. And as such, case is closed. Stated alternatively, applicant does not care about the impact of allowing a patent application claiming substantially the same subject matter as the prior art because the prior art does not disclose how its composition/material is prepared so as to positively imply how crystalline or non-crystalline (amorphous) the structure of the composition/material is. Because of that and necessarily, the technique employed by the prior art to make the composition/material produces a crystalline structure at all. That is very interesting. The examiner finds himself in complete disagreement with applicant's position. The examiner does care about potential infringement issues or allowing an electrode composition over the teachings of the prior art of record when there is no sufficient and clear information to evidence non-anticipation or non-obviousness with respect to the disclosed subject matter. Assuming arguendo that there is no description on how the composition/material of the prior art was prepared, then the examiner contends that there is a substantially degree of probability that the process of making the composition/material of the prior art can produce a composition/material exhibiting a non-crystalline structure.

To support this, the examiner reminds applicant the following applicant's assertion: "*The reason the applicants discussed the lack of disclosure regarding how the prior art alloys were made is because it is well-known in the field of materials science that the manufacturing method affects whether the resulting composition is amorphous or crystalline. Because the cited references do not disclose sufficient details regarding how the alloys disclosed therein were prepared, it is impossible to determine whether or not the alloys were inherently amorphous*"

(See the 10/10/06 amendment on page 3, 1<sup>st</sup> full paragraph). Currently, applicant is not completely sure or 100 % confident that the prior art of record does not disclose amorphous material but applicant is asking the examiner to overlook that and pass the application to issue or allow the present application or withdraw the rejection (as phrased by the applicant “*the rejection must be withdrawn*”). Don’t you think that if it is impossible to determine whether or not the alloys are inherently amorphous, then, there is a reasonable certainty or expectation to believe the alloy disclosed in the prior art might in fact be amorphous. Other than asking to forget about the teachings of the prior art and to pass the application to issue, applicant has also failed to provide objective evidence to better support that the *prima-facie* inherent anticipation rejection is improper. Applicant is reminded that it is the Examiner’s duty and/or responsibility to set the record straight, to clarify uncertainties or any cloudy issues, and to evaluate substantiated evidence in order to make a determination affecting the patentability of claimed subject matter, and ultimately, affecting and impacting the public. The examiner would be very irresponsible if an application containing such a degree of ambiguity and/or uncertainty, like the present application, is passed to issue. If applicant believes that it is more convenient to allow the present application in view of the impossibility of determining crystallinity or amorphousness of the disclosed material/composition, applicant then would be disappointed to learn the examiner does not share applicant’s doctrine or vision. The examiner does not agree with applicant’s assertion that under these circumstances, the doctrine of anticipation by inherency does not apply.

4. (new response) Without losing the scope of the Examiner’s response to applicant’s argument, the examiner clarifies herein the basis for rejecting the claims based on inherency as applicant appears to have misconstrued the inherency case. The Examiner’s main contention for

advancing the inherency rejection is based on two different reasoned analysis. First one, as previously stated in the prior office action, “*products of identical chemical composition can not have mutually exclusive properties*”. Second and more importantly, as admitted by the applicant, “*it is well known in the field of materials science that the manufacturing method affects whether the resulting composition is amorphous or crystalline*” (See 10/10/06 amendment on page 3, 1<sup>st</sup> full paragraph) and “*it is textbook materials science that the manufacturing method influences the microstructure and properties of alloy*” (See 10/10/06 amendment on page 4, sole full paragraph). Therefore, since the manufacturing method might affect the final (or lack of) structure of the manufactured material, it is very difficult for the examiner to make a clear determination about the crystallinity and/or amorphousness of the material/composition disclosed in the prior art. The greatest uncertainty in this case is whether or not the JP’112, the JP’221 and the WO’532 do inherently teach the “amorphousness” of their materials. Now, it would have been easier to resolve this issue if the novelty of applicant’s invention relied upon the concept that most of the manufacturing methods for making the claimed composition would necessarily produce a crystalline product, and therefore, applicant’s amorphous product is novel because of its amorphousness or lack of crystalline structure. But such is not the present case. What applicant is arguing is that none of the JP’112, the JP’221 and the WO’532 inherently teach or disclose an amorphous material because they are silent about respective methods of manufacturing their composition/material. Therefore, lack of disclosure about manufacturing method of a material/composition is equivalent to assume or presume that such a material/composition is crystalline. But simultaneously, applicant admits on record that “*the manufacturing method affects whether the resulting composition is amorphous or crystalline*”. In

the absence of additional information provided by the applicant to otherwise support non-inherency, it is very difficult for the examiner to side with applicant on this issue. The fence is so far away on the opposite side that jumping into applicant's side is just extremely harmful. It is non-sense to believe or assume that the three (3) references used to set forth respective prima-facie cases of inherent anticipation (i.e. the JP'112, the JP'221 and the WO'532 ) do not inherently include a variation of the claimed composition in the form of amorphous material. Three (3) different prima-facie cases of anticipation based upon inherency have been set forth by the examiner to support rejections under Section 102, and the only applicant's assertion, upon admitting that the manufacturing method affects whether the resulting composition is amorphous or crystalline, is that the JP'112, the JP'221 and the WO'532 do not inherently anticipate the claimed subject matter because they appear to be wholly silent about the manufacturing method which is usable to further determine crystallinity or amorphousness. Unfortunately, the examiner cannot concur with applicant's assertion.

5. With respect to applicant's arguments that "*the classic example of this phenomenon is the case of graphite and diamond*", the examiner respectfully avers that, currently, we are not dealing with graphite or diamond. The issue under contention is whether the all-encompassing limitations "*one electrochemically inactive elemental metal*" (which one? Indefinite) and "*at least one electrochemically active elemental metal*"(which one? Indefinite) can be taken as any given representative composition that behaves as set forth by the applicant. The answer is NO, because applicant's classic example (i.e. graphite vs. diamond) calls for specific materials, compositions and crystalline microstructures, which are certainly quite different from applicant's claimed amorphous material.

6. With respect to the JP'922, applicant has argued that such a reference “*provides no further disclosure regarding the microstructure of this alloy, nor does it provide sufficient details regarding the manufacture of this alloy*”. Therefore, “*it is impossible to determine whether these alloys are in the form of an amorphous mixture*”. In reply, the examiner contends that applicant bears the burden of proof in inherency rejections. “[T]he discovery of a previously unappreciated property of a prior art composition, or of a scientific explanation for the prior art’s functioning, does not render the old composition patentably new to the discoverer.” *Atlas Powder Co. v. Ireco Inc.*, 190 F.3d 1342, 1347, 51 USPQ2d 1943, 1947 (Fed. Cir. 1999). Thus the claiming of a new use, new function or unknown property which is inherently present in the prior art does not necessarily make the claim patentable. *In re Best*, 562 F.2d 1252, 1254, 195 USPQ 430, 433 (CCPA 1977). *In In re Crish*, 393 F.3d 1253, 1258, 73 USPQ2d 1364, 1368 (Fed. Cir. 2004). The PTO can require an applicant to prove that the prior art products do not necessarily or inherently possess the characteristics of his [or her] claimed product, *In re Fitzgerald*, 619 F.2d 67, 70, 205 USPQ 594, 596 (CCPA 1980) (quoting *In re Best*, 562 F.2d 1252, 1255, 195 USPQ 430, 433-34 (CCPA 1977)). See MPEP 2112. This is equally applicable to the discussion of the JP'764 and the EP'359 concerning this matter.

7. As to applicant’s arguments concerning “*the manufacture of the alloy*”, it is noted that manufacture of the alloy is not at issue in the present application. Patentability of a product does not depend on method of making the same. Thus, such an argument adds nothing of significance to the patentability of a product as instantly claimed (i.e. an electrode composition). The same goes for the discussion of the JP'764 about this aspect.

Accordingly, the examiner also asserts that it is not enough that applicant's representative personally believes that the prior art does not disclose the "amorphous characteristic of the electrode composition. That is to say, the arguments of counsel cannot take the place of evidence in the record. An assertion of what seems to follow from common experience is just attorney argument and not the kind of factual evidence that is required to rebut a *prima facie* case of inherent anticipation/obviousness (See **MPEP 716.01 and 2145: Consideration of Applicant's Rebuttal Arguments**).

8. With respect to applicant's comments regarding the JP'112, the JP'221 and the WO'532, applicant has argued that the limitation "*consisting essentially of*" exclude compounds which may include certain forms of crystallinity. There is no dispute about the implication of the term "*consisting essentially of*", namely, the exclusion of additional materials by limiting the scope of a claim to the specified materials or steps and those that do not materially affect the basic and novel characteristic(s) of the claimed invention. However, an interpretation of the literal claim scope reveals that applicant is not claiming that both the "*at least one electrochemically inactive elemental metal*" and the "*at least one electrochemically active elemental metal*" are in the form of an amorphous mixture. Present claim language only stipulates, indeed, that the "*at least one electrochemically active elemental metal*" consists essentially of a metal in the form of an amorphous mixture, but not both metals as apparently argued by the applicant. In other words, the "*consisting essentially of*" limitation does exclude the presence of crystalline regions or materials only for the "*at least one electrochemically active elemental metal*", but not for the "*at least one electrochemically inactive elemental metal*". The examiner has interpreted the claim language as such.

9. Concerning the EP'402 and the EP'359, it has been contended that “*It describes using a conventional casting protocol to produce the alloys. Such a method would not produce an amorphous alloy...*” (the EP'402) or “*an annealing step characteristic of processes that produce crystalline material*” (the EP'359). However, in the absence of objective evidence demonstrating the validity and technical accuracy of such contention, the foregoing argument has little merit and fails to provide patentable distinction over that prior art reference. A statement or argument by the attorney is not factual evidence. (See **MPEP 716.01 and 2145 Consideration of Applicant's Rebuttal Arguments**).



RAYMOND ALEJANDRO  
PRIMARY EXAMINER